

**REMARKS**

By the present amendment, claims 7-10 corresponding to claims 3-4 but dependent on claims 2, 3, and 7, respectively, have been added.

In addition, new method claims 11-20 corresponding to system claims 1-10 has been added. Thus, claims 1 and 11 recite a common special technical feature that defines a contribution to the art. Since the present application is a national stage of a PCT application, it is submitted that system and method claims should be examined together in accordance with PCT “unity of invention” rules.

Claims 1-20 are pending in the present application. Claims 1 and 11 are the only independent claims.

I. Double patenting rejection

In the Office Action, claims 1-6 are provisionally rejected under 35 U.S.C. 101 for double-patenting over claims 1 and 3-7 of U.S. Appl. No. 10/595,630 (claiming priority of French Appl. No. 0313155), now U.S. Patent No. 7340885 issued March 11, 2008.

The rejection is respectfully traversed. Allowed claim 1 of the 10/595,630 application (claim 1 of US7340885) is as follows:

1. A system for providing assistance in the regeneration of depollution means associated with oxidation catalyst-forming means, the means being integrated in an exhaust line of a motor vehicle diesel engine and in which the engine is associated with common manifold means for feeding the cylinders of the engine

with fuel, and being adapted at constant torque to implement a strategy of regeneration by injecting fuel into the cylinders in at least one post-injection, the system comprising:

- means for detecting a regeneration request and thus a request for post-injection;

- **means for detecting a period in which the engine is idling;**

- means for acquiring the temperature downstream from the catalyst-forming means;

- means for determining a maximum quantity of fuel to be injected through post-injections during this period by implementation of the strategy of regeneration, on the basis of said temperature; and

- **reduction means for progressively reducing the or each post-injection as soon as the total quantity of fuel that has been injected through post-injections since the start of the post-injections during this period reaches the predetermined maximum quantity.**

(Emphasis added.) Thus, at least the detector means (“detector means for detecting a state of the foot being raised on the vehicle accelerator”) and the interrupting means (“means for immediately interrupting the or each post-injection operation...”) as recited in present claim 1 are not taught or

suggested by, let alone substantially identical to, the detecting means and reduction means in the claims of the '630 application (now US 7340885).

Further, a Terminal Disclaimer is submitted with this paper.

In view of the above, it is submitted that the rejection should be withdrawn.

## II. Art rejections

Next, in the Office Action, claims 1-3 are rejected under 35 U.S.C. 102(b) as anticipated by US 6,655,133 to Mikami et al. ("Mikami").

Further, claim 4 is rejected under 35 U.S.C. 103(a) as obvious over Mikami in view of US 6,488,725 to Vincent et al. ("Vincent"), claim 5 is rejected under 35 U.S.C. 103(a) as obvious over Mikami in view of US 6,023,928 to Peter-Hoblyn et al. ("Peter-Hoblyn"), and claim 6 is rejected under 35 U.S.C. 103(a) as obvious over Mikami in view of US 3,157,987 to Pouit ("Pouit").

The rejection is respectfully traversed. It is submitted that Mikami, and especially the passage to which reference is made in the Office Action (Fig. 31 and corresponding text at col. 24, steps 503-505) do not teach or suggest a system and method as in the present claims.

In particular, contrary to the assertion in the Office Action, step 505 of Mikami does NOT correspond to a step of "immediately interrupting the or each post-injection operation as soon as the quantity of fuel injected has reached the predetermined maximum quantity" as in the presently claimed invention. Specifically, in Mikami, step 505 in which "the temperature increase control is stopped" is dependent on step 504 in which "it is determined whether the deceleration of the engine is terminated or not" (see Mikami at col. 24, lines 43-51). Thus, in Mikami, post-injections stop when deceleration is terminated, not after a predetermined quantity of post-injection fuel has

been expended.

In other words, Mikami sets no limit as to the post-injected amount of gas, and especially not by determining a maximum quantity of fuel to be injected in the post-injection operations during the period of returning to idling following the foot being raised on the accelerator, and on the basis of said temperature, and immediately interrupting the or each post-injection operation as soon as the quantity of fuel injected has reached the predetermined maximum quantity, as provided in the present claims. Further, Mikami does not provide any motivation or incentive to arrive at the presently claimed invention, and the other cited references fail to remedy this deficiency. Therefore, the present claims are not anticipated by Mikami, and not obvious over Mikami taken alone or in any combination with the other cited references.

In addition, with respect to the dependent claims, it is submitted that the cited references completely fail to teach or suggest the combined features of each of these respective claims. Therefore, each of the dependent claims is not anticipated by Mikami, and not obvious over Mikami taken alone or in any combination with the other cited references.

In view of the above, it is submitted that the rejections should be withdrawn.

#### Conclusion

In conclusion, the invention as presently claimed is patentable. It is believed that the claims are in allowable condition and a notice to that effect is earnestly requested.

In the event there is, in the Examiner's opinion, any outstanding issue and such issue may be resolved by means of a telephone interview, the Examiner is respectfully requested to contact the undersigned attorney at the telephone number listed below.

Amendment  
U.S. Appl. No.: **10/595,633**  
Attorney Docket No. **LAV0313163**

In the event this paper is not considered to be timely filed, the Applicants hereby petition for an appropriate extension of the response period. Please charge the fee for such extension and any other fees which may be required to our Deposit Account No. 502759.

Respectfully submitted,

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